

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
PO. Box. 1450
Alexandria, Viginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/528,964	03/20/2000	Donald Bernard Bivens	FL-1065	6749	
75	90 05/22/2003				
Mark A Edwards			EXAMINER		
E I Du Pont De Legal - Patents	Nemours and Company		HARDEE,	HARDEE, JOHN R	
1007 Market Street				· · · · · · · · · · · · · · · · · · ·	
Wilmington, DE 19898			ART UNIT	PAPER NUMBER	
			1751	1751	
			DATE MAILED: 05/22/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

'

		/ h					
	Application No.	Applicant(s)					
•	09/528,964	BIVENS ET AL.					
Office Action Summary	Examiner	Art Unit					
	John R Hardee	1751					
The MAILING DATE of this communication app Period for Reply	ears n the cover sheet with the c	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be tir within the statutory minimum of thirty (30) day rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed vs will be considered timely. the mailing date of this communication. ED (35 U.S.C. § 133).					
1) Responsive to communication(s) filed on	·						
2a) ☐ This action is FINAL . 2b) ☑ Thi	s action is non-final.						
3) Since this application is in condition for allowated closed in accordance with the practice under a Disposition of Claims							
4)⊠ Claim(s) <u>1-7</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdraw	vn from consideration.						
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-7</u> is/are rejected.							
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examiner							
10)☐ The drawing(s) filed on is/are: a)☐ accep	ted or b)□ objected to by the Exa	miner.					
Applicant may not request that any objection to the							
11) The proposed drawing correction filed on		oved by the Examiner.					
If approved, corrected drawings are required in rep							
12) The oath or declaration is objected to by the Exa	-						
Priority under 35 U.S.C. §§ 119 and 120		s) (d) or (f)					
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(2	1)-(u) or (i).					
a) All b) Some * c) None of:	s have been received						
1. Certified copies of the priority documents2. Certified copies of the priority documents		ion No					
3. Copies of the certified copies of the prior	•••						
application from the International But * See the attached detailed Office action for a list	eau (PCT Rule 17.2(a)).	·					
14)⊠ Acknowledgment is made of a claim for domestic	priority under 35 U.S.C. § 119(e) (to a provisional application).					
 a) The translation of the foreign language pro 15) Acknowledgment is made of a claim for domesti 	• •						
Attachment(s)	•						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)					

Application/Control Number: 09/528,964

Art Unit: 1751

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 9-25480. At [0041] the reference discloses refrigerant compositions consisting of 5% of isobutane, 22-23% of R-125, 17-26% of R-32 and 47-55% of R-134a. The vapor pressure properties are inherent properties of the disclosed compositions. Condensing and evaporating of the compositions may be reasonably inferred, as their disclosed utility is in refrigeration, which is a cycle of condensation and evaporation. As all of the limits of the claims have been met, this disclosure constitutes anticipation.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Page 3

Application/Control Number: 09/528,964

Art Unit: 1751

4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 9-25480. The claims are obvious because they are anticipated. Anticipation is the epitome of obviousness.
- 7. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/03473 A1. The reference discloses compositions for use in heat transfer devices, such as refrigerators and air conditioners (abstract). At lines 3+ of p. 5, the refeence discloses that the compositions may comprise, most preferably, 10-25% by weight of R-32; 35-75% of R-125; 1-7% of a hydrocarbon and 13-45% of R-134a. Suitable

Application/Control Number: 09/528,964

Art Unit: 1751

hydrocarbons preferably include one or more of butane, isobutane, pentane and isopentane (p. 4, lines 4-6). While pentane is especially preferred, the teachings of a reference are not limited to what is exemplified or preferred. This reference differs from the claimed subject matter in that it does not disclose a composition which reads on applicant's claims with sufficient specificity to constitute anticipation.

It would have been obvious at the time the invention was made to make such a composition, because this reference teaches that all of the ingredients recited by applicants in amounts which meet applicants' percentage limitations are suitable for inclusion in a refrigerant composition. The person of ordinary skill in the refrigeration art would expect the recited compositions to have properties similar to those compositions which are exemplified, absent a showing to the contrary. The vapor pressure properties are inherent properties of the disclosed compositions. Applicants' recited vapor pressure limitations may be met by following the teaching of the reference. Condensing and evaporating of the compositions may be reasonably inferred, as their disclosed utility is in refrigeration, which is a cycle of condensation and evaporation.

In the case where the claimed ranges overlap or lie inside ranges disclosed by the prior art, a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed Cir. 1990).

8. Any prior art made of record and not relied upon is of interest and is considered pertinent to applicant's disclosure.

Application/Control Number: 09/528,964 Page 5

Art Unit: 1751

0661.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to the examiner, Dr. John R. Hardee, whose telephone number is (703) 305-5599. The examiner can normally be reached on Monday through Friday from 8:00 until 4:30. In the event that the examiner is not available, his supervisor, Dr. Yogendra Gupta, may be reached at (703) 308-4708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-

John R. Hardee Primary Examiner

May 20, 2003